



OPPORTUNITIES AHEAD: 2011 ANALYSIS OF WORKFORCE NEEDS

GALLATIN VALLEY

A REPORT FOR



DEVELOPED BY



ARTSMARKET, INC., BOZEMAN, MT

TABLE OF CONTENTS

EXECUTIVE SUMMARY	2
EMPLOYMENT TRENDS ANALYSIS FOR GALLATIN AND PARK COUNTIES	11
EMPLOYER NEEDS	24
STUDENT INTERESTS	32



GALLATIN COLLEGE

MONTANA STATE UNIVERSITY

RESEARCH FINDINGS: NEEDS ANALYSIS, NEW DEGREE AND CERTIFICATE PROGRAMS

PART 1. EXECUTIVE SUMMARY

This research report to Gallatin College summarizes findings from an evaluation of employer, student, and area business trends to assist the college in determining the most useful degree programs to add as the college continues to grow. Three primary methods were used in the study:

- 1) Area employers representing health care, business, technology, hospitality, engineering/architecture, and manufacturing were contacted by letter, were interviewed by phone or in person, and if appropriate were contacted with follow up questions. A total of 42 area employers participated in this study.
- 2) Students including traditional and nontraditional students were surveyed via email, through email distribution conducted with the assistance of area schools. Students included those that will shortly graduate from alternative and traditional high schools in the Gallatin College service area (Gallatin and Park counties); and individuals in their twenties and older who are considering returning to college for job-related training. Adults considering Gallatin College were interviewed in a focus group setting. Students from Livingston High School, Bozeman High School, and Bridger Alternative School, along with adult students were reached through the survey. A total of 85 students responded to the surveys and/or participated in focus groups.
- 3) Area employment data and trends were studied using Bureau of Labor data sets and data from the State of Montana and the US Bureau of Labor Statistics.

KEY FINDINGS AND RELATED CONTEXT

Within two years, it is likely that Gallatin Valley businesses could annually absorb every Gallatin College graduate seeking a job in key workforce sectors. Based on their own quantification of need, businesses could potentially hire hundreds of graduates. However, many of these hires will stay for many years, so annual need will potentially level off.

Two sectors studied for this report are in high need of associate and certificate programs as soon as they can be established. These are the health care sector and the restaurant/hospitality sector. Area employers in both sectors are eager for MSU and Gallatin College to launch programs, and are eager to hire graduates. In the culinary arts field, it is likely that every graduate of a Gallatin College program would be able to find employment in the greater Bozeman area immediately upon graduation.

In the health care field - despite high competition from out of state and out of the area applicants - the need for qualified medical assistants, surgical assistants, and licensed practical nurses is high, and local employers feel that Gallatin College graduates would fare well right from the start.

For other sectors, however, projections are more qualified, reflecting the hesitancy of area employers. It is essential to provide context to the findings, as this study has been conducted before Montana has emerged from the current recession. The recession came late to Gallatin County and the Southwestern portion of Montana but for many industries and employment sectors it is likely to linger for a number of years.¹ This has had a profound impact on most employer views expressed in this report for the manufacturing, business, IT and construction-related sectors. Several employers declined to be interviewed for this study because they are not anticipating hiring any employees in the foreseeable future. Others noted that their employment needs are greatly diminished. A number expressed lack of optimism that jobs would be available when students graduate. Over all, most local employers in sectors outside culinary/hospitality and medical who were interviewed for this study stated it will be at least five years before the local economy regains strength to the point where hiring will pick up. At that point the employers say they will hire the most qualified individuals with the highest level of training and experience.

These concerns are mitigated by Montana's Department of Labor and Industry Research and Analysis Bureau, which finds that job creation will pick up as soon as 2012 for some industry groupings; and that job creation continues within the health care field, which saw no negative impact during the recession. In fact, the Department's projections note that between 2012 and 2016, most industry sectors offering

"In previous years, rapid forecasted job growth alone could be used to anticipate worker shortages in a particular occupation or industry. However, the 2007 recession has left many Montanans unemployed and looking for work. Many industries and occupations will regain jobs in the future, but will be able to hire dislocated workers back into their old jobs rather than having to train new workers for the jobs. Job growth exiting the recession is expected to be slower than before the recession."
Barbara Wagner, Senior Economist,
Research and Analysis Bureau,
Montana Department of Labor &
Industry. [Montana Employment Projections 2010 through 2020.](#)

¹ Source: Montana Employment Projections 2010 through 2020, Montana Department of Labor & Industry.

potential positions for Gallatin College graduates will be back to hiring new workers. Thus, despite local current pessimism, the longer view shows that now is indeed the time to begin planning for new programs that will position Montana students for employment opportunities.

For their part, prospective students want certificate and associate programs to be top quality and of a depth that will help them compete successfully to win jobs as compared to workers with similar degrees who can move here from other places. For some fields, the high level of competition is a given. For example, even during the current economy Bozeman Deaconess Hospital receives upwards of 175 job applications a week. In such situations, local workers want a way to stand out from other applicants.

Job turn-over in the Gallatin Valley is low. Employers across all fields stress that employees leave jobs for others at a lower rate they do in larger markets, and they don't migrate out of the area for new jobs. As a result, employment opportunities are largely concentrated in new fields or areas where the workforce is not able to provide enough skilled workers or in fields where there is overall growth. Today, numerous employers have exceeding low turn over to the point where they simply don't seek out prospective employees. Employers with popular offerings and locations such as Bridger Bowl, for example, have multi-year waiting lists, but even employers such as a local motel which, prior to the recession, continuously sought qualified bookkeepers now finds that the employees are not leaving at pre-recession rates.

That said, there are decided areas of opportunity for Gallatin College to both meet area employer needs in workforce preparation and to meet student needs and interests. The greatest needs for qualified employees are in the medical field, hospitality, business-related information technology, and technology-based manufacturing. Employers in all three fields are continuously searching for qualified local employees, and even go the distance of providing their own in-house training programs, often lasting two or three months. Students seeking jobs in these fields include both traditional and alternative high school graduates, as well as older non-traditional students.

ADDITIONAL CONTEXT: TIMING OF JOB RE-GROWTH

Given the ramp-up time for new college programs and the one to two year course time before the first students graduate from new programs, it is entirely appropriate for Gallatin College to begin adding key programs now, even though - with the exception of culinary arts/hospitality and the medical field - employers are not yet hiring and are unable to quantify the number of new hires they will make post-recession.

To gain a clearer picture of when hiring will pick up, it is useful to review the Montana Department of Labor & Industry's projections for the state. As is evident, while it will be post 2020 before some industry sectors such as transportation and material moving regain positions to their pre-recession peak, other sectors such as health care have seen no downturn and are hiring at consistently pre-recession levels. Meanwhile, many of the other sectors that are likely to employ prospective Gallatin College graduates from the programs examined in this study are going to be re-hiring within the next two years.

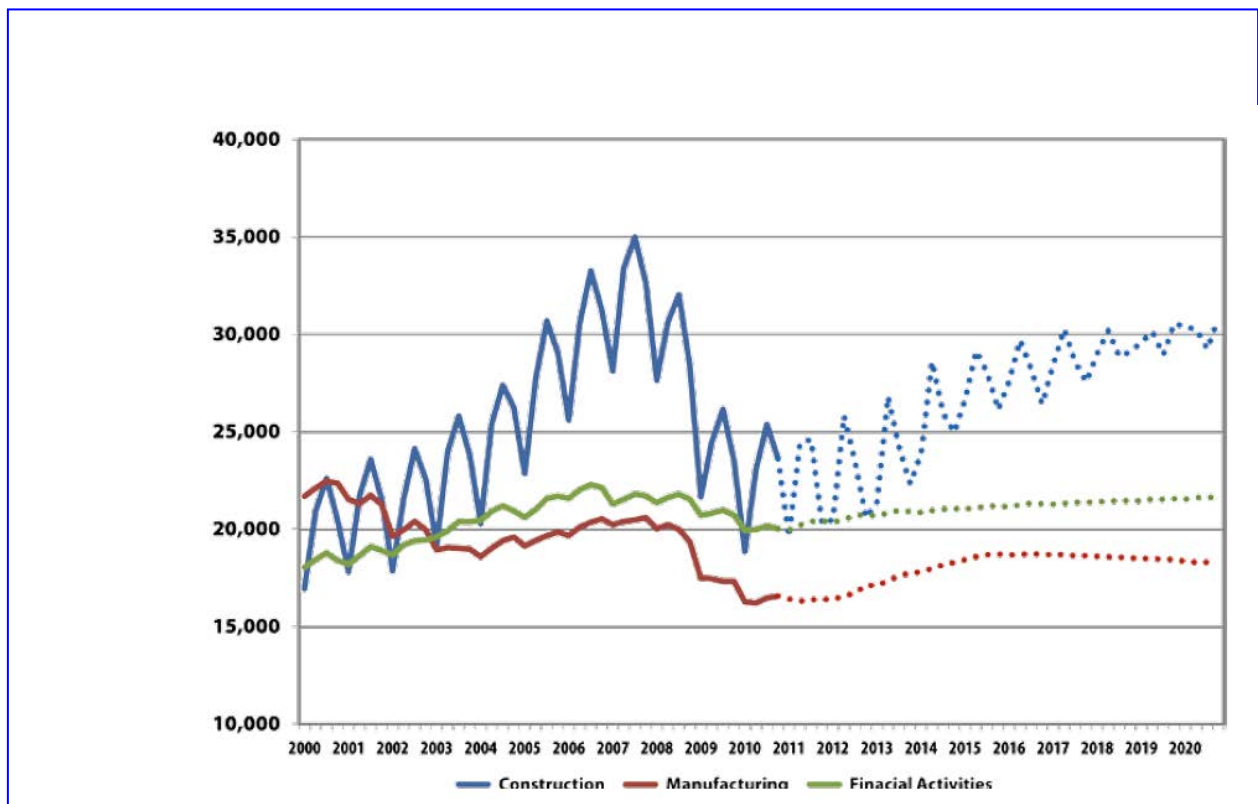
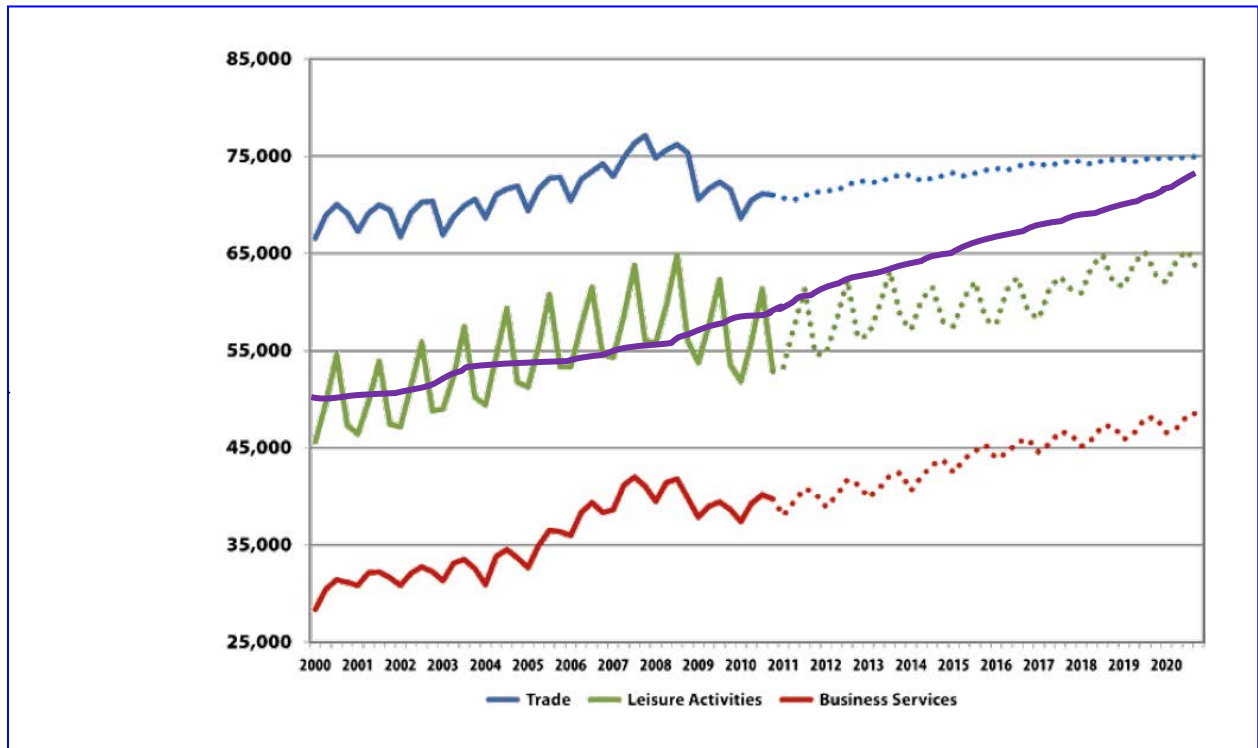
TABLE 1. MONTANA EMPLOYMENT PROJECTIONS COMING OUT OF THE RECESSION.

SOC Code	Occupational Category	2010 Average Wage	Recession Loss	Annual Gain 2011-2012	Annual Gain 2013-2020	Recover Peak
35-0000	Food Preparation and Serving Related	19,666	-1,666	678	576	2013
41-0000	Sales and Related	29,657	-3,950	613	387	2019
43-0000	Office and Administrative Support	29,398	-3,437	475	579	2016
39-0000	Personal Care and Service	21,927	71	260	247	no losses
25-0000	Education, Training, and Library	37,710	986	223	139	no losses
53-0000	Transportation and Material Moving	33,186	-2,526	217	159	past 2020
29-0000	Healthcare Practitioners and Technical	63,836	1,326	211	331	no losses
31-0000	Healthcare Support	24,635	941	201	282	no losses
49-0000	Installation, Maintenance, and Repair	39,435	-1,365	164	152	2018
37-0000	Building and Grounds Cleaning and Maintenance	23,213	-1,137	163	190	2016
51-0000	Production	32,843	-2,788	157	143	past 2020
47-0000	Construction and Extraction	40,393	-7,913	110	662	past 2020
13-0000	Business and Financial Operations	52,648	-189	94	206	2012
27-0000	Arts, Design, Entertainment, Sports, and Media	34,811	-279	88	71	2013
15-0000	Computer and Mathematical	53,694	-89	75	104	2012
21-0000	Community and Social Services	34,200	414	72	101	no losses
11-0000	Management	74,019	-1,626	65	103	past 2020
17-0000	Architecture and Engineering	61,504	-307	45	93	2014
23-0000	Legal	58,481	-75	9	37	2013
33-0000	Protective Service	37,702	105	-16	82	no losses
45-0000	Farming, Fishing, and Forestry	31,698	-310	-16	-6	past 2020
19-0000	Life, Physical, and Social Science	47,251	311	-137	-9	no losses

Source: Occupational Projections, 2010 to 2012 and 2010 to 2020, Research and Analysis Bureau. OES, 2010, Bureau of Labor Statistics

The projected re-growth of workforce size in various industry sectors provides context to this analysis. While it will take years before trade and leisure activities sector employers regain their pre-recession workforce levels, health care has seen no drop and will continuously grow. The business services sector will grow rapidly, eclipsing pre-recession workforce levels by as early as 2015. Because this sector includes positions in I.T. and administration – for which local employers voiced needs for qualified employment candidates – this area of training may be one to add soon. Manufacturing jobs are unlikely to return to their pre-recession levels at any time before 2020: however, area employers stress an on-going need for highly skilled computer-operated machinery workers. This need is voiced by employers nationally. Yet once jobs are filled in these very high paying positions, future turn-over will be slow, so the need may be more short term than long term. In Montana, construction jobs have been hit hard by the recession, accounting for a 30% loss in pre-recession job levels: Montana’s Department of Labor and Industry projects it will take until well after 2020 for this sector to rebound.

MONTANA STATEWIDE INDUSTRY GROWTH PROJECTIONS BY YEAR²



² Source: Montana Department of Labor & Industry Research and Analysis Bureau

TABLE 2. ASSOCIATE DEGREE HIRING COMPARED TO OTHERS: MONTANA DEPARTMENT OF LABOR & INDUSTRY ANALYSIS

Education/Training Category	Percent of Jobs	Recession Change	Annual Job Growth 2010-2012	Annual Job Growth 2010-2020	Year to Peak
Short to Moderate On-the-Job Training	55%	(15,959)	2,514	2,537	2016
Long-Term On-the-Job Training or Work Experience	16%	(7,415)	445	802	2020
Associate or Vocational Degree	11%	286	283	477	no losses
Bachelor's Degree or Higher	19%	(78)	608	841	2011

Table 2 points to the value of associate and certificate degrees during recessionary times. There were no losses evident during the recession among workers with associate or certificate training, as compared to high level losses for workers with only secondary education or on-the-job training. Going forward, local employers interviewed for this study noted that employees with associate and certificate degrees are their highest need and that they would be likely to favor associate/certificate degree-holding applicants over those they might typically have hired and given short term on-the-job training.

FASTEST GROWING AND REBOUNDED JOBS: SUMMARY FINDINGS FROM LOCAL EMPLOYERS

Regional two year degree and certificate job growth will be strongest in the medical and health care field. This echoes national trends reported here based on Bureau of Labor Statistics data and created due to the country's aging population: ten out of the 20 fastest growing occupations across all industries, 2008-2019, are in health care. Business representatives in the area health care industry point to on-going, significant need for certified medical assistants, licensed practical nurses, and in jobs such as nutrition, physical therapy, home health assistants and surgical tech assistants. Area health care providers also see high on-going need for medical records and health information specialists – IT jobs for which there are currently not enough qualified applicants. As the need to work with medical records and government insurance/claims grows, area health care providers are looking for individuals who combine expertise in medical records and business office skills. These individuals must be able to pass national certification examinations in medical coding: currently, the health care providers are offering in house training, often for up to four months, because they cannot find individuals with the level of training needed. Individuals who had what might be a dual certification in office administration and medical records could be highly sought after and well compensated.

Culinary arts jobs are a constant and significant need, based on high turnover in the field coupled with the presence of over 300 restaurants in the Gallatin Valley alone and the larger number of restaurants and resorts in the Greater Yellowstone area. Based on employer interviews, there is locally strong need for line cooks, institutional/cafeteria cooks, and kitchen preparatory staff. There is also high need for restaurant managers. Hospitality employers are also in need of trained front desk and management people: a single Bozeman hotel would be likely to hire as many as twelve summer workers out of a Gallatin College hospitality program and five or six year round workers. They seek young adults who

can present themselves well, converse and communicate effectively, follow through and complete work assignments, and who can be reliable.

Business assistance jobs ranging from administrative assistants to clerks, bank tellers, and other similar occupations will come back from the recession beginning in 2012. (See Table 1.) All businesses contacted in the area state they currently need a skilled office/administrative work force, and offered unanimous appeals for job applicants who have essential knowledge and skills in the basics: writing letters and emails in correct format and with excellent grammar; communicating appropriately over the phone and in person; and even in dressing appropriately. In fact, general workforce preparation is much sought: employers want Gallatin College to teach students the importance of a good work ethic, workplace behavior, job follow-through, appearance and presentation, basic communications, punctuality, and reliability. A one year certificate in essential office skills such as these would be widely appreciated by employers and would help them identify prospective high-quality employees. Many report on-going shortages, and even more: employers now have on-going “revolving door issues” when they must continuously dismiss employees for lack of essential skills and abilities.

IT will continue to grow as a substantial need, but not necessarily within high technology companies in the area. Next to medical jobs, local employers suggest that these will be among the fastest growing employment need in the region. While a company such as Right Now Technology looks nationally and internationally for entry level employees and does not see a need to recruit from prospective Gallatin College graduates, other employers ranging from banks to hospitals seek trained and certified IT personnel. These jobs are likely to combine IT knowledge with the field-specific content: for example, medical information IT, or bank information IT, or insurance IT. As with many of the jobs in the medical field that would likely be addressed by Gallatin College programs, employers are now providing in-house training because they cannot find employees who have received the level of training needed. Some technology degree areas that had been on the table for use-needs analysis in this study, including web design and visual communications, were not seen as important as field-specific I.T. support, programming, and networking. This suggests what could be a basic I.T. certification followed by field-specific content in a second year or more advanced program.

Area manufacturers need skilled technically trained workers. Manufacturers see a current, significant gap between students who only have high school diplomas and those with four year degrees, and are enthusiastic about the opportunity to see a work force develop that has the skills that could come from a two year program. Machining technology is a significant need. So are computer numeric controlled (CNC) machine technology, and industrial systems machining. These are highly skilled jobs, often paying up to \$80,000 a year within the Gallatin Valley, and require expertise and training beyond basic skills. Currently, employers are likely to advertise statewide or beyond for employees, and positions are often empty for long periods of time. Manufacturers cannot expand their businesses because of a lack of such skilled employees. This type of training program would allow them the chance to grow their local work force and build their businesses. However, the important caveat is that workers in these jobs stay, so once local positions are filled, Gallatin College graduates would most likely need to look beyond the Gallatin Valley. The good news is that national data shows employers everywhere are looking for this type of highly trained manufacturing workers.

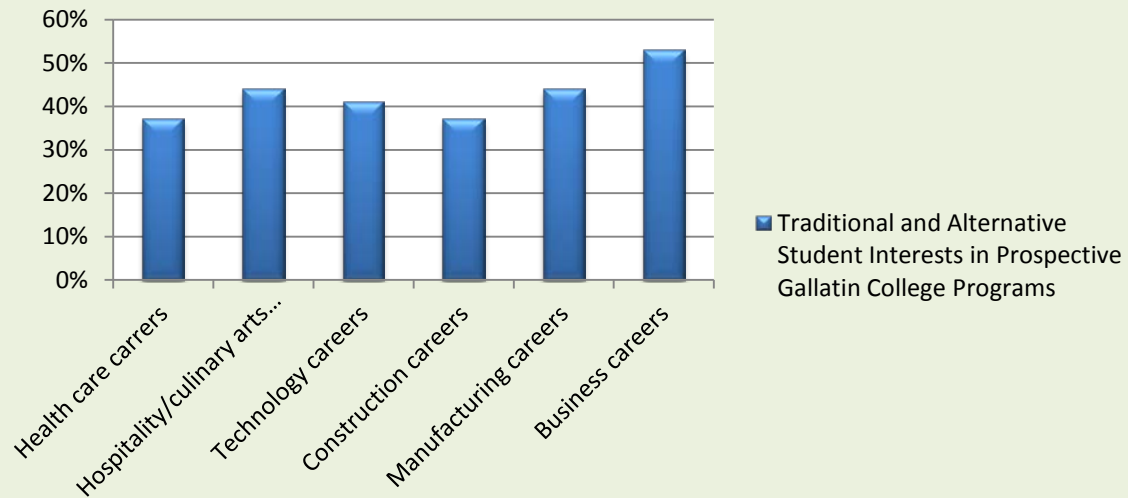
There are also unique hospitality-related opportunities. For example, a number of those in the hospitality field see unique niche opportunities that may lead to the development of certificate(s). For example, there are opportunities for certificate programs such as in guiding. There is no area fly fishing guide school program of significance³, yet area employers annually seek many employees – and often recruit nationally for employees - who have a combination of knowledge and experience in fishing and rivers, first aid and safety, interpersonal skills and communications ability, leadership and responsibility, and regional natural history.

STUDENT INTERESTS: SUMMARY FINDINGS FROM AREA STUDENTS

- **Both traditional and alternative students are interested in more program opportunities from Gallatin College.** There is a sizable number of high school students in both Park and Gallatin counties who would seriously consider two year programs offered by Gallatin College as an alternative to four year degrees or as a stepping stone to eventually undertaking four year programs; many don't know enough about the programs and others seek the type of medical, IT, culinary/hospitality and manufacturing programs being considered. Alternative students, in particular, emphasize the need for quality instruction and high standards to merit their time and money. On-line instruction would be helpful, according to those interviewed, but not essential and not for all courses. Flexible course times, including evenings and weekends, would be more important to accommodate students who work and raise families.
- 80% would be very interested in attending Gallatin College for programs if it offered flexible scheduling
- 78% would be very interested in attending Gallatin College if they could obtain financial aid.
- 65% would be very interested Gallatin College if they knew local employers preferred to hire Gallatin College graduates.
- 65% of students surveyed would definitely prefer evening and weekend classes to weekday classes.
- 44% would be very interested in attending Gallatin College because they would have the opportunity to continue on for further study at MSU.
- 40% would be very interested if there were on-line courses offered.

³ There is a private guide school in western Montana (Clarks Fork.) Several area outfitters and hospitality firms are interested in partnering with Gallatin College with the goal of creating such a program.

Traditional and Alternative Student Interests in Prospective Gallatin College Programs



PART 1: EMPLOYMENT TRENDS ANALYSIS FOR GALLATIN AND PARK COUNTIES

The degree and certificate programs studied on behalf of Gallatin College are in fields as follows listed here. Those identified as needed in the Gallatin Valley are highlighted in bold.

MEDICAL INDUSTRY

Medical assistant/technician
Health care administration
Medical records and coding
Medical office technology

BUSINESS

Accounting
H.R. management
Human resources substance abuse
Administrative assistant
Loan Clerk/General Clerk
Secretary
Office manager
Logistics manager⁴

HOSPITALITY INDUSTRY

Restaurant and catering management
Institutional management
Resort management
Food service management
Gaming management
Culinary arts
Hospitality technology
Hospitality and food accounting

TECHNOLOGY INDUSTRY

Database management
I.T. support
I.T. networking
I.T. programming technology
I.T. web design and management
I.T. systems security
Visual communications

MANUFACTURING INDUSTRY

Electronics technology
Industrial systems technology
Welding technology
Machining technology
Computer numeric controlled machine technology
Computer engineering
Industrial systems machining
Tooling technology
Plastics manufacturing technology
Pharmaceutical manufacturing
Sustainability technology

⁴ Logistics management is a fast growing new occupation that has not been formally classified for education requirement by the Bureau of Labor Statistics. The BLS does note that while bachelor's degrees are preferred, associate degrees may be accepted.

According to the Montana Department of Labor & Industry, Research and Analysis Bureau, a number of these job classifications will be among the fastest growing occupations in the state over the next seven years.⁵ Several related job types are included in the fastest growing jobs in the state. These related job types, not listed above, are listed in italics.

TABLE 3. FASTEST GROWING OCCUPATIONS 2008-2018: MONTANA DEPARTMENT OF LABOR & INDUSTRY

Rank in projected growth rate 2008-2018 Statewide, Montana	Occupations Requiring Associate or Certificate Degrees	2008	2018	Percent Change ⁶	Current number of statewide job openings	Calculated number of statewide job openings, 2018, based on % change from 2010
1.	Physical therapist assistants ⁷	80	110	28%	--	--
4.	<i>Cardiovascular technologists</i>	140	170	25%	10	12.5
5.	<i>Radiation technologists</i>	70	90	25%	20	25
7.	<i>Surgical technologies</i>	280	350	24%	20	25
9.	Respiratory therapist	310	380	22%	10	12.5
17.	Medical records and health information technicians	870	1030	18%	40	47
24.	<i>Medical and clinical laboratory technicians</i>	270	310	15%	--	--
26.	<i>Radiology technicians and technologists</i>	790	910	15%	20	23
28.	<i>Medical transcriptionists</i>	480	540	14%	10	11
29.	<i>Welders, cutters, solderers and brazers</i>	1340	1530	14%	50	57
32.	<i>Licensed practical and vocational nurses</i>	3100	3500	13%	300	339
33.	Computer support specialists	1280	1430	12%	80	89

There are 12 occupations among the 50 fastest growing occupations listed by the state of Montana that require the two year or certificate degrees considered by Gallatin College. The largest area is the inter-related set of medical jobs that range from practical nurses to medical records and the numerous types

⁵ Decennial data has as its baseline 2008, going through 2018.

⁶ The national average percent change is 10.12% for the 2008-2018 employment projection series. In Montana, thirty seven job types that require associate or certificate degrees are anticipate to grow at faster than this rate.

⁷ Numerous types of health care assistants are among the top growing job types. We have listed all that are included in the Department of Labor and Industry data sets that would potentially be supported by training as a medical health assistant.

of technician jobs. Technical training had not been on the list for direct consideration, but the Labor data sets show that employer needs in this will grow rapidly into the foreseeable future: as the next section of the report will show, area employers reinforced this viewpoint.

While the above chart breaks out computer support specialists as a relative small area of growth, it does not capture the full range of computer and I.T. related jobs for which area employers seek qualified employees. The medical records need is significant within both Gallatin and Park counties. So too are other I.T. related jobs in electronics repairs and electronics equipment (the 20th ranked fastest growing need, above) and in welding and other related manufacturing and metalworking areas.

TWO YEAR AND CERTIFICATE PROGRAMS AS PRECURSORS TO 4-YEAR COLLEGE EDUCATION

This study assessed if students will continue from possible certificate and associate degree programs to four year bachelor's degree programs. According to the Bureau of Labor Statistics, a number of the jobs for which preparatory certificate and associate programs are being considered are "foundational" in that individuals employed in these jobs seeking career advancement will likely go on for additional education. For example, medical assistants often go back to school to become registered nurses. Medical records specialists may return to school for additional business administration training and move up in medical office or practice administration. Computer control machine operators (electronics tech) often go on for additional college degrees in physics or engineering. I.T. support and networkers may return for business training, or enter marketing (related to communications I.T.) or seek training both in I.T. and the subject matter of the field they work within. For example, it will be increasingly common for individuals to be certified in both I.T. and credentialed in medical records.

Area restaurant and resort owners would like to see both two year and four year culinary arts programs at Gallatin College and MSU, and/or a mix of certificates and associate programs in culinary arts, restaurant management, and hotel management. They seek individuals who are able to move up career paths from line cooks to executive chefs and restaurant managers, who are committed to staying in the area and who can help them grow their restaurants and hotels.

CERTIFICATION AND CREDENTIALING

In describing the educational requirements and standards for many of the jobs for which Gallatin College would prepare the workforce, the Bureau of Labor Statistics Occupational Handbook for 2010-11 places repeated emphasis on professional certification and credentials. The importance of this was reinforced by a number of business community interviewees, who noted that they will always consider applications who have certifications as more qualified than those without.

ANNUAL JOB OPENINGS IN MONTANA 2008-2018 BY OCCUPATION INCLUDING POSITIONS CREATED AND POSITIONS VACATED

Despite employer caution coming out of the recession, Montana currently has a high number of annual job openings for many of the occupations for which Gallatin College degrees and certificates would serve as preparation, based on statewide estimates done by the Department of Labor & Industry.

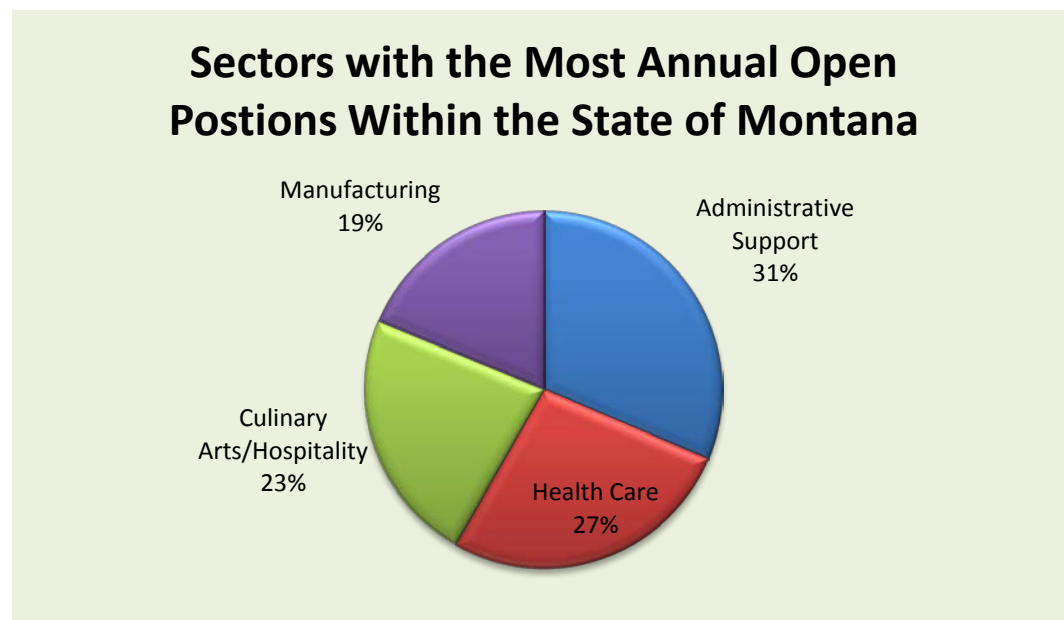


TABLE 4. PROJECTED ANNUAL OPENINGS: MONTANA RESEARCH & ANALYSIS BUREAU, MONTANA DEPARTMENT OF LABOR AND INDUSTRY

Occupation	Number of Annual Openings in Montana
Business/General Administration	
<i>General Office Clerks</i> ⁸	164
Loan Clerks/Assistants	13
<i>Tellers</i>	141
<i>Information and Record Clerks</i>	643
TOTAL ANNUAL OPENINGS	961
Health Care	
Health Technologists and Technicians	383
<i>Nurses Aides</i>	246
Licensed Practical Nurses	126
Medical Records Keepers	40
Surgical Technologists	16
OT/PT Assistants	13
TOTAL ANNUAL OPENINGS	824

⁸ Occupations listed in italics may not require associate or certificate degrees but BLS data suggests that employers often prefer applicants with certification or other post secondary education.

Culinary Arts/Hospitality	
<i>Food Preparation Workers</i>	188
Restaurant Cooks	162
<i>Hotel Desk Clerks</i>	114
Institutional and Cafeteria Cooks	74
Fast Food Cooks	62
First Line Restaurant/Food Supervisors	43
Short Order Cooks	22
Lodging Managers	18
Food Service Managers	15
Chefs and Head Cooks	8
TOTAL ANNUAL OPENINGS	706
Manufacturing	
Vehicle and Mobile Equipment Mechanics	253
<i>Metalworkers, Plastics Workers</i>	101
Assemblers and Fabricators	66
Electrical and Electronic Equipment Mechanics	49
Welders, Cutters, Solderers, Braziers	47
Industrial Machinery Mechanics	24
Machinists	21
Machine Tool Setters and Operators	10
Precision Machine Setters and Operators	4
TOTAL ANNUAL OPENINGS	575
Information Technology	
Computer Specialists	229
Computer Support Specialists	54
Network Administrators	35
Computer Analysts	33
Network Systems and Data Communications Administrators	21
TOTAL ANNUAL OPENINGS	372

MEAN ANNUAL WAGES BY OCCUPATION: BUREAU OF LABOR STATISTICS, SOUTHWESTERN MONTANA

Mean annual wages differ significantly between industry groups and occupations. Culinary arts jobs are among the lowest paying of all those studied, which relates directly to the high level of turn-over in the field. Overall, I.T. jobs are the highest paying, followed by many manufacturing jobs, and then by healthcare technician occupations.

TABLE 5. SOUTHWEST MONTANA NONMETROPOLITAN AREA: 2010 OCCUPATIONAL EMPLOYMENT AND WAGE ESTIMATES FOR JOBS WITH ASSOCIATE/CERTIFICATE DEGREES

Business/General Administration	
<i>General Office Clerks⁹</i>	\$24,210
Loan Clerks/Assistants	\$39,750
<i>Tellers</i>	\$23,560
<i>Information and Record Clerks</i>	\$23,040
Administrative assistants	\$28,950
AVERAGE	\$27,920
Health Care	
Health Technologists and Technicians	\$52,840
<i>Nurses Aides</i>	\$23,080
Licensed Practical Nurses	\$35,030
Medical Records Keepers	\$28,160
Surgical Technologists	\$38,850
OT/PT Assistants	\$21,830
AVERAGE	\$33,299
Culinary and Hospitality	
<i>Food Preparation Workers</i>	\$20,380
Restaurant Cooks	\$21,160
<i>Hotel Desk Clerks</i>	\$20,380
Institutional and Cafeteria Cooks	\$24,720
Fast Food Cooks	\$18,620
First Line Restaurant/Food Supervisors	\$29,740
Short Order Cooks	\$20,390
Lodging Managers	\$32,690
Food Service Managers	\$50,350
Chefs and Head Cooks	\$48,570
AVERAGE	\$28,700
Manufacturing	
Vehicle and Mobile Equipment Mechanics	\$36,720
<i>Metalworkers, Plastics Workers</i>	\$21,170
Assemblers and Fabricators	\$24,600
Electrical and Electronic Equipment Mechanics	\$47,530
Welders, Cutters, Solderers, Braziers	\$36,500
Industrial Machinery Mechanics	\$42,990
Machinists	\$34,530
Machine Tool Setters and Operators	\$40,420
Precision Machine Setters and Operators	\$43,010
AVERAGE	\$36,387
I.T.	
Computer Specialists	\$57,020
Computer Support Specialists	\$41,580
Network Administrators	\$53,900
Computer Analysts	\$64,080
Network Systems and Data Communications Administrators	\$50,830
AVERAGE	\$47,392

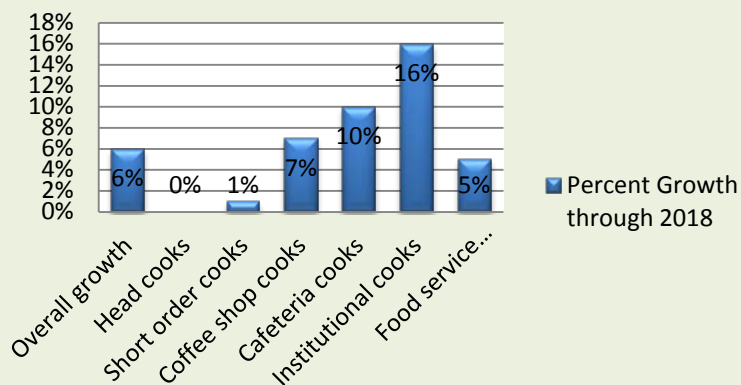
⁹ Occupations listed in italics may not require associate or certificate degrees but BLS data suggests that employers often prefer applicants with certification or other post secondary education.

US JOB GROWTH PROJECTIONS, 2008-2018 FOR POSITIONS REQUIRING CERTIFICATION OR ASSOCIATE DEGREES CONSIDERED BY GALLATIN COLLEGE

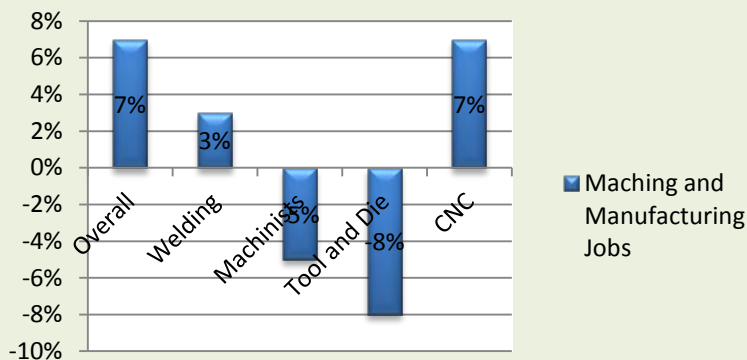
While many Gallatin College students will stay in the Gallatin Valley and in Montana, the value of their degree and overall education is also important in the larger national context. In most industries and occupations, national job growth projections mirror those for Montana, however national projections show less need for specialized manufacturing jobs than are evident statewide in Montana.

PROJECTED NATIONAL GROWTH IN OCCUPATIONS

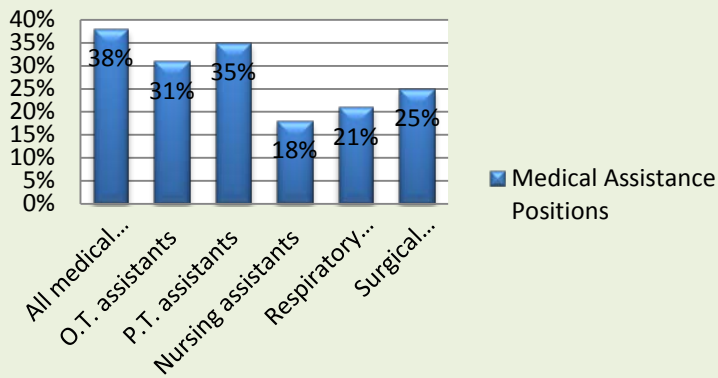
Culinary Arts Jobs: % Growth through 2018



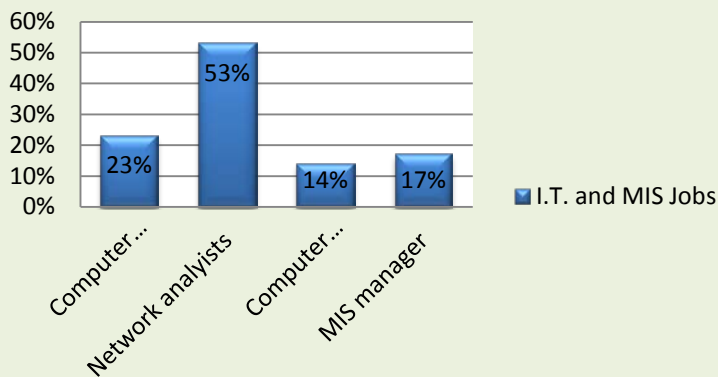
Machining and Manufacturing Jobs: % Growth Through 2018



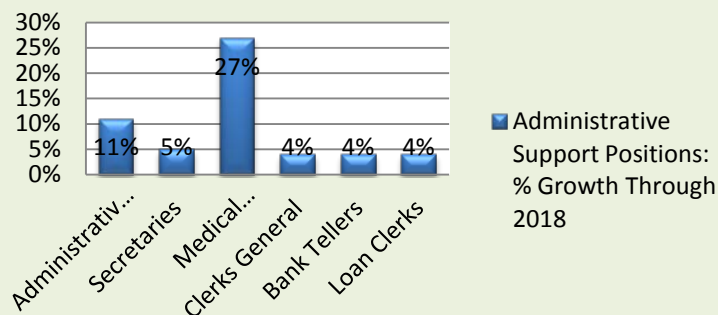
Medical Assistance Jobs: % Growth Through 2018



I.T. and MIS Jobs: % Growth Through 2018



Administrative Support Positions: % Growth Through 2018



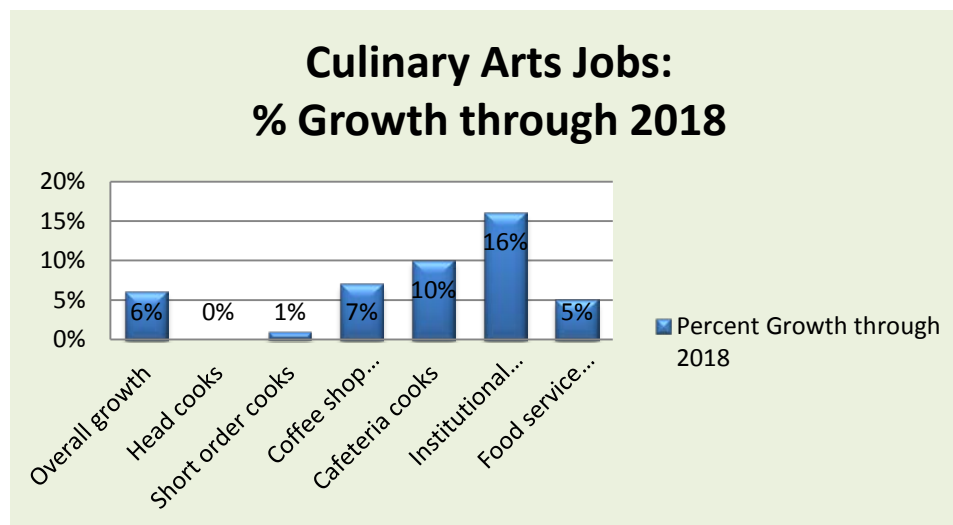
DETAILED GROWTH BY OCCUPATION TYPE: US DEPARTMENT OF LABOR OCCUPATIONAL DATA

Culinary Arts: Line Cooks, Kitchen Prep.

Certification is generally required for certain types of chefs, including pastry and home-service cooks.

Foodservice Management Professional certification (FMP) is offered via the National Restaurant Education Foundation.

Employment increase: nationally and overall, these jobs are anticipated to increase by 6% through 2018.



Line cook, line chef and kitchen prep jobs are expected to remain consistently plentiful as the majority of the jobs are part time and are held by young workers (under age 35) who frequently migrate to other higher paying positions and to full time occupations. While the number of jobs will increase only moderately, the turn over within this field creates continuous need for new workers. These jobs exist throughout the restaurant industry and resort/hospitality industry and in local grocery stores, schools, hospitals and extended care facilities. There is high turn-over, so entry-level job seekers generally find employment. However, individuals seeking full time positions at high-end restaurants may encounter competition as the number of applicants exceeds the number of job openings.

On average, *restaurant* cooks jobs are expected to grow at 8%, which is the national average for all job growth. Nationally, employment of short-order cooks is expected to grow by less than 1% and employment of kitchen prep and food preparation workers is expected to grow more slowly than the average for all occupations. As restaurants and quick-service eating places find more efficient ways of preparing meals, such as at central kitchens that serve multiple outlets or wholesale and distribution facilities, food preparation will become simpler. However, the need for *institutional* cooks – hired by hospitals and schools – will grow faster than average and the area presence of numerous resorts and tourism destination will likely mean continued high demand for entry-level positions where there is high seasonal turn over.

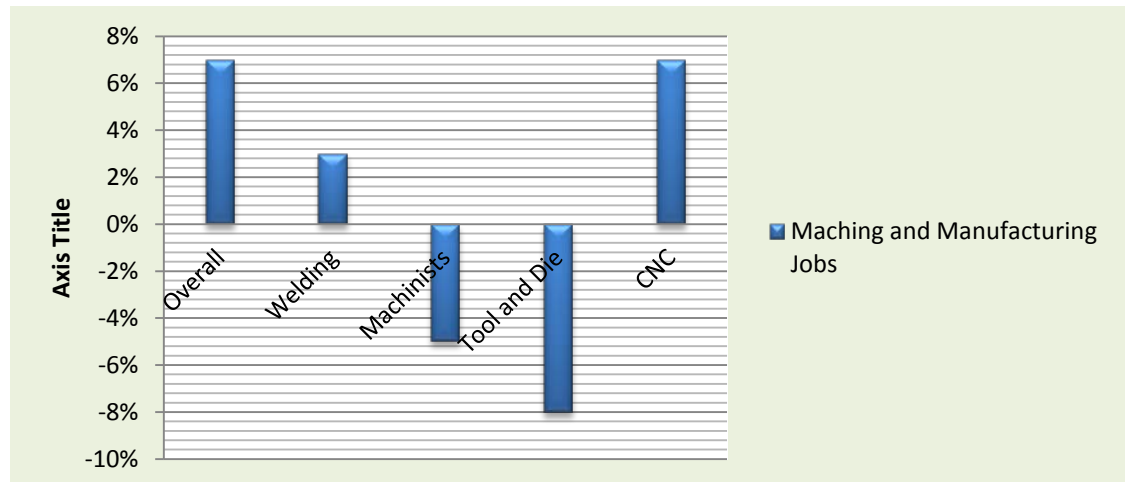
Food service manager positions are expected to increase slowly, at about 5%, but may grow higher locally due to seasonal needs of resorts.

Manufacturing, machine technology, industrial systems machining, machinery maintenance.

State apprenticeship boards certify tool and die makers as journey workers after they have completed a licensed program.

Some welding positions require general certifications in welding or certifications in specific skills such as inspection or robotic welding. The American Welding Society certification courses are offered at many welding schools. The Institute for Printed Circuits offers certifications and training in soldering.

Employment: limited increase with some decrease.



Computer control programmers and operators use computer numerically controlled (CNC) machines to produce a wide variety of products, from automobile engines to computer keyboards. A growing number of computer control programmers and more skilled operators receive their formal training from community or technical colleges including postsecondary courses in mechanical drawing, mathematics, blueprint reading, computer programming, or electronics. Jobs are in specialty machine shops, and automotive metalworking. All of the occupations in this area are anticipated to grow at slightly lower than the national average, or 7%, through 2018.

Machinist jobs are anticipated to decline nationally by about 5% by 2018, however the presence of custom machine shop businesses in the region may result in higher-than-average employment to support the growth projections of these companies. That said, these are stable and long term jobs where there is low employee turnover, so once positions are filled there may be lower future job growth. *Welding job* opportunities are expected to be good for skilled welders because some employers are reporting difficulty finding qualified workers, hovering nationally about 3% growth. Job prospects for welders will vary with the welder's skill level. Prospects should be good for welders trained in the latest technologies. Welding schools report that graduates have little difficulty finding work, and many welding employers report difficulty finding properly skilled welders. *Tool and die makers* are among the most highly skilled workers in manufacturing. While employment in this job category is projected to decline moderately at a national level, job opportunities should be excellent, as many employers report difficulty finding qualified applicants. Nationally, the number of workers receiving training in this occupation is expected to continue to be fewer than the number of openings created each year by tool and die makers who retire or transfer to other occupations. A major factor limiting the number of people entering the occupation is that many young people who have the educational and personal qualifications necessary to learn tool and die making usually prefer to attend college or do not wish to enter production occupations. Overall employment is anticipated to decline by 8% by 2018.

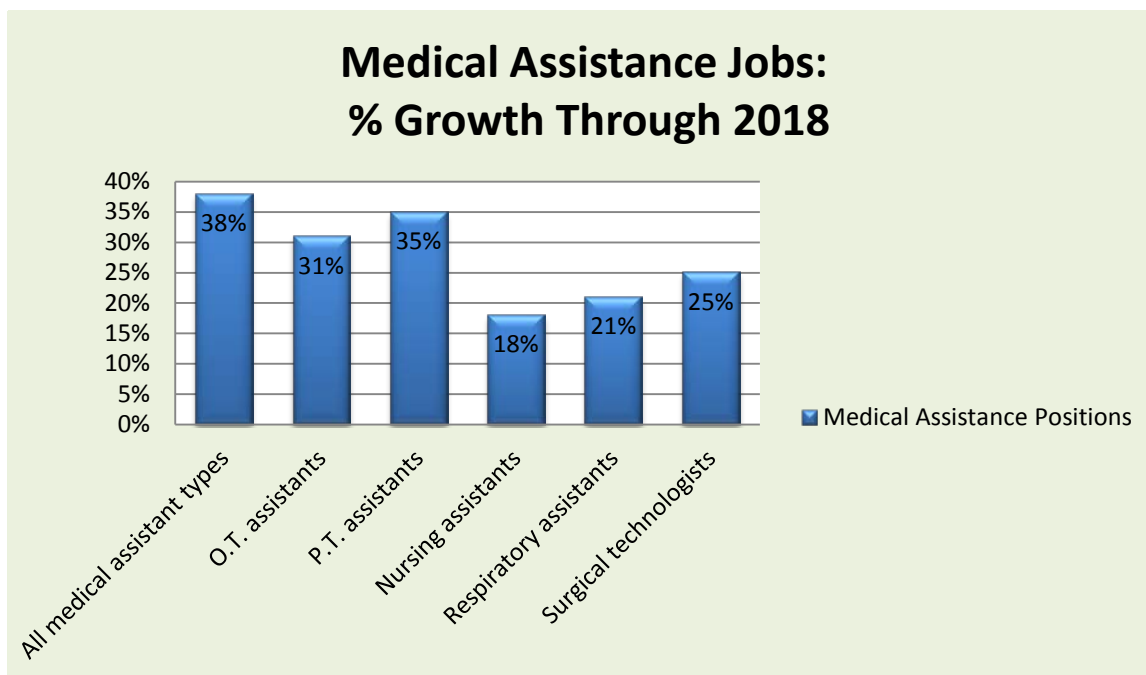
Medical Assistants, Records, OT Assistants, Nursing Aides/Assistants, Surgical Technologists

The National Board for Respiratory Care (NBRC) offers the Certified Respiratory Therapist (CRT) credentials. Surgical Technologists professional certification from the National Board of Surgical Technology and Surgical Assisting by graduating from a CAAHEP-accredited program and passing a national certification examination.

The American Academy of Professional Coders (AAPC) offers coding credentials. The Board of Medical Specialty Coding (BMSC) and Professional Association of Health care Coding Specialists (PAHCS) both offer credentialing in specialty coding. The National Cancer Registrars Association (NCRA) offers a credential as a Certified Tumor Registrar (CTR).

Nursing aides must complete a minimum of 75 hours of State-approved training and pass a competency evaluation. Aides who complete the program are known as certified nurse assistants (CNAs) and are placed on the State registry of nurse aides.

Employment increase: nationally and overall, these jobs are anticipated to grow at a rate much faster than average through 2018.



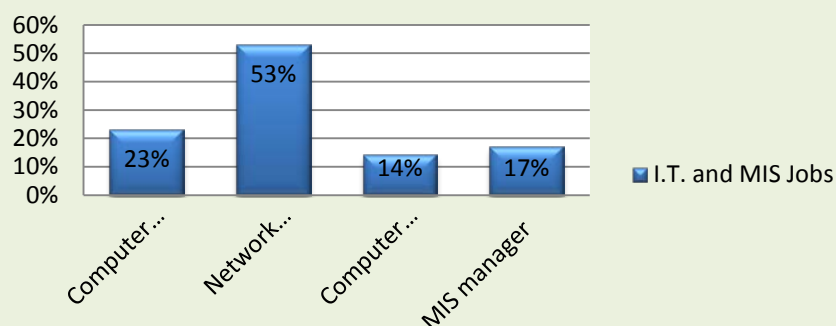
Nationally, *medical assistant* jobs are anticipated to grow by 38% through 2018. Employment is anticipated to be nearly as high across all major employers: hospitals, universities and school districts, physician offices, outpatient care centers, and offices of other health care professionals. *Occupational therapist aide and assistant* jobs are anticipated to grow rapidly, at about 30-31% by 2018. *Physical therapy assistant and aide* jobs are anticipated to grow by 35% as changes in insurance coverage will allow patients more access to P.T. and increase demand for service, and as physical therapists increase reliance on assistants and aides to reduce costs. Jobs will be in hospitals and individual practices, as well as in long term care facilities and home health care. Nursing assistants/aide positions are anticipated to grow at 18%, with employment by residential care facilities growing at 19%. Respiratory therapist positions are anticipated to grow at 21%, with growth in demand coming from growth in the middle-aged and elderly population and from increasing requirements in case management, disease prevention, emergency care, and early detection of pulmonary disorders. Surgical technicians/technologist positions will grow by 25%.

Medical records technicians and clerk positions will grow at about 20% through 2018. Technicians that demonstrate a strong understanding of technology and computer software will be in particularly high demand. Positions will be in hospitals, extended care facilities, outpatient facilities, physician offices, and government. As new requirements increase the number of medical tests, treatments and procedures to be performed, needs for these employees will escalate.

IT Support, Programming, Networking Administrators, Computer security specialists, Web management, telecommunications specialists, computer support administrators. Locally, this general occupation group may include management information system directors (MIS), though nationally these positions typically require bachelor's degrees.

Certifications are offered through product vendors, computer associations, and other training institutions.

I.T. and MIS Jobs: % Growth Through 2018



Employment of *computer systems administrators* is expected to increase by 23 percent from 2008 to 2018. Demand for these workers will increase as firms continue to invest in new technologies. The increasing adoption of mobile technologies means that more establishments will use the Internet to conduct business online. This growth translates into a need for systems administrators who can help organizations use technology to communicate with employees, clients, and consumers. Growth will also be driven by the increasing need for information security. As cyber attacks become more sophisticated, demand will increase for workers with security skills.

Employment of *network systems and data communications analysts* is projected to increase by 53 percent from 2008 to 2018. The growing reliance on wireless networks will result in a need for many more of these workers. Demand for *Web administrators* and *Web developers* will also be strong, at 23%. More of these workers will be needed to accommodate the increasing amount of data sent over the Internet, as well as the growing number of Internet users. In addition, as the number of services provided over the Internet expands, Web administrators and developers will continue to see employment increases.

Computer support specialists provide technical assistance, support, and advice to individuals and organizations that depend on information technology. They work within organizations that use computer systems, for computer hardware or software vendors, or for third-party organizations that provide support services on a contract basis, such as help-desk service firms. Support specialists are usually differentiated between *technical support specialists* and *help-desk technicians*. Job growth will be fastest in several industries that rely heavily on technology including financial services (data processing) and healthcare. Job growth is anticipated at 14%.

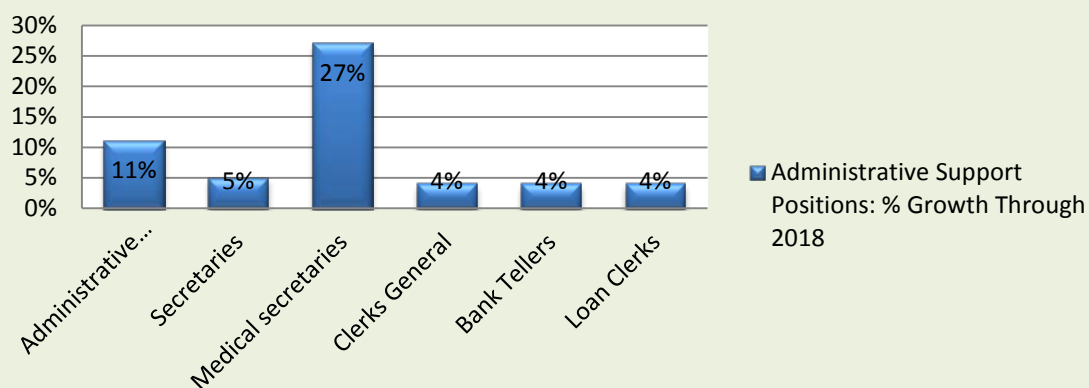
Management information systems (MIS) managers manage computing resources for their organizations. This occupation is anticipated to grow at 17%. MIS manager often work under the chief information officer and plan and ensure the availability, continuity, and security of data and information technology services in their organizations. Businesses seek MIS workers who have taken courses such as finance, marketing, accounting, and management, as well as systems design, networking, database management, and systems security.

Administrative Assistance, Secretaries, Clerks, Tellers, Loan Assistants

Certification is offered by the International Association of Administrative Professionals; National Association of Legal Secretaries (NALS), Inc.; Legal Secretaries International, Inc; and International Virtual Assistants Association (IVAA). Prominent designations include the Certified Professional Secretary (CPS) and the Certified Administrative Professional (CAP).

Administrative assistance is expected to grow at about as fast as average. Administrative assistants will grow at about 11%, while slower than average growth is anticipated for secretarial positions. However, high growth is anticipated for medical secretaries.

Administrative Support Positions: % Growth Through 2018



PART 2. EMPLOYER NEEDS

HEALTH CARE INDUSTRY

Health care providers in Gallatin and Park counties were among the most enthusiastic responders to this study. Their need for qualified workers is constant, and has remained high throughout the recession.

They do not have difficulties hiring registered nurses¹⁰ – many of whom come to them from MSU - and overall, their turn-over rates are far lower than the national average for health care providers. Some, such as Bozeman Deaconess, are practically overwhelmed by the number of applications for work: the hospital receives as many as 175 applications a week.

Trends in health care are causing area hospitals and long term health care providers to look for differently-qualified applicants than they now see. The first key trend is in the need for health information specialists, an occupation that is viewed as continuing to grow. Currently, area health care providers are having a difficult time filling positions for medical records management: this critical area requires both certification and a two year associate degree, not now available in the region. According to Bozeman Deaconess, the continued move to computerized medical records combined with what will almost certainly be increased reporting and coding needs as health care insurance evolves requires a level of training that simply can't be found. Another health care provider in the region that has worked to recruit medical records specialists from elsewhere in the country has found the cost of such recruitment to be high and has seen too much turn-over as the generally young employees they recruited from outside the state have moved on to other locations or have moved back to their home communities. Some area providers have opted to recruit from their office administration staff, and bear the brunt of training these employees.

“Because of the move to electronic medical records we’ll continue to see more need for coding. Qualified employees in this is really important because they handle insurance and Medicare and more and more specialty coding. If MSU could combine medical records training and business office skill training, it would be wonderful. It is the major area where we cannot find people.” – Area health care provider.

The next priority of health care providers was not anticipated; that is licensed practical nurses who may also work as medical assistants. Again, this is due to changes in the health care system. As the cost of health care provision continues to escalate, hospitals are looking for ways to reduce their reliance on registered nurses. This is seen as a growing trend, and area providers would prefer to hire practical nurses for medical assistant jobs who have two year degrees or one year certificates as opposed to high school diplomas, as is now often the case.

All areas of medical assistance are high priority for area health care providers. The most difficult positions to fill are surgical tech jobs, and area hospitals often end up working with temporary placement firms and temporary employees because they cannot find qualified individuals for full time

¹⁰ While the larger health care providers noted no difficulties in finding and hiring qualified RNs, others stressed that it is difficult to find experienced local RNs who will stay with them over time.

work. Other positions that are difficult to fill are respiratory therapists, radiology technicians, ultrasound technicians and home health care providers. Of note, smaller and more rural health care providers in the area note that they and others in Montana need therapists who have the ability to work

in a variety of areas – for example, radiology combined with ultrasound. They often have to send new hires out for training to enable them to be “less specialized” and more able to take on a number of therapy jobs.

“The area is growing, and there is an aging population. The patient level is increasing. The need for LPNs will grow.” – Area health care provider.

Hiring local employees would be favored. Currently, area health care providers spend considerable resources recruiting from out of the area because of a lack of a qualified resident workforce. As one H.R. director said, “We try to recruit locally. We would absolutely recruit from Gallatin College graduates. We would much rather hire someone from this area, someone who knows Montana. Any time we move someone here we run the risk of them not liking it. If it’s a choice, all

things being equal, we’ll hire locally rather than bring someone in from another state. And in addition, there is something to be said for hiring new grads because we can train them right into our culture.”

Another HR recruiter commented that “it’s nice to find someone locally with experience because the training is easier. And, it would be wonderful to have continuing education available through Gallatin College. Medical staffs need on-going courses and certification, and there isn’t much here to offer.”

There was a high level of enthusiasm for the opportunity to work with MSU in designing training programs that would help ensure that the future workforce has the training and skills necessary for these jobs. Area hospitals would like to work with MSU and Gallatin College in shaping a practical nursing/certified medical assistant program. However, those in HR hiring stress that there is a need to also work with area high schools. As one HR recruiter said, “Kids think it is a big challenge to go into the medical field. We and Gallatin College together need to get into the high schools to talk up the full range of medical jobs.”

How many positions are out there to be filled? In rural hospitals and with smaller health care providers, HR specialists estimate that they need at least one qualified hire a year in each of the therapy/tech areas, but that turn-over may diminish if they can hire locally as opposed to searching for people who may move into the area and then leave. “We want long term people who bring a passion to this,” said one interviewee. Larger health care providers in Bozeman are more likely to need a number of qualified individuals for each slot per year because these entry level positions often have more churn than other jobs: many certificate-holding employees stay for a couple of years and then go back for additional training in the medical field. For information technology jobs such as medical records specialists, the need is for several qualified individuals per year per health care provider, at least in the short term. Area hospitals predict that the annual need for qualified hires will continue to grow for a number of years and then stabilize. They also stress that professional certification should be a part of any degree or certificate program. Currently, hospitals provide their coders with pre-certification training on-line, which can take up to six months, and provide training for jobs such as hospice and home health care assistants, which takes up to 120 hours.

GENERAL BUSINESS

Area businesses face the same dilemma as area health care providers looking for medical records specialists, medical assistants and practical nurses: hire over-qualified college graduates or under-qualified high school graduates because of a lack of a local workforce with two year degrees or certificates. High school graduates are largely found to be lacking in essential, basic skills needed for many jobs and haven't mastered basics such as communications skills, basic writing skills, and even job punctuality and appearance. But college graduates are seeking higher paying jobs and career paths that are beyond what area employers can currently offer. Hence, the need for basic administrative training – a two year degree for administrative professionals – is significant.

None of the region's banks require four-year degrees for entry level positions, and when individuals with bachelors' degrees apply, in the words of one H.R. professional, "they want to step right into a loan officer program." A two year degree would give applicants for general banking positions a step up in landing basic jobs, whereas four year graduates are often turned away because of over-qualification. And, as one bank officer noted, "if people are pursuing a two year degree, they could work part time in the field at the same time, which would be a mutual benefit."

The biggest trending need that bankers see is for entry level personnel with a combination of administrative and I.T. skills and knowledge. Because of specific compliance issues in the financial field such as for F.D.I.C., banks are increasingly looking for applicants who have some basic experience – for example, has worked part time as a teller – and who has bank-related I.T. experience. Would applicants with a Gallatin College associate degree that combined administration and I.T. be preferred when jobs open? "Absolutely. For the first two levels of entry, it would definitely help," said one H.R. specialist from a Bozeman bank. "And, because banks tend to promote from within, individuals who come with these skills "would have a very good chance of moving up."

The I.T. need is interesting. Area banks – and other businesses – see a growing need for applicants with dual training – I.T. and basic administration, for example. As one business leader said, "In the fourteen years I have been here, without question the most difficult position to fill – and it is getting harder – is in I.T. The reason it is so difficult to fill is that we don't just look for people with I.T. We want people who have knowledge and skills in it but just as much knowledge and capacity in something else as well."

"We search hard to find employees to fit what we want and then we train them, and right now we have to offer a lot of training and courses – a whole library of courses. We do struggle to train effectively. If people came to us having had some basic classes it would be wonderful, because we do like to hire local people. There is always an opening in at least one of the businesses here in Bozeman that needs someone like this who could come out of Gallatin College." –Insurance company executive.

Area banks and insurance companies note that there is no regional training program to prepare a local workforce for the combination of I.T. and content-specific skills. Insurance companies, for example, are looking for people who can move up to account executives, beginning in an account assistant role. The only “model” program from which area companies have been able to recruit students is at Miles Community College which has an insurance curriculum that the statewide insurance association helped design and is available on-line. Area employers would like to see either a variation of it or possibly the Miles Community College program itself be offered together with live instruction that includes basic business, basic accounting, and customer relations along with computer skills.

As in the health field, there is far less turn over in Bozeman than in other cities, especially with employees who are residents as opposed to young transplants to the area. There are more openings due to retirements of long time staff than due to expansion of area businesses, though there is hope for expansion after the recession.

Training in administration, financial services and I.T. combined would be eagerly sought after by area employers. But basic level training is also needed. “Customer service training in itself is important. There are such important things to teach, like how to let things roll off, how to relate more to a customer. And people coming into these jobs need to be able to know how to present themselves, know how to dress, how to talk with people. Most people coming in for jobs – and they may have degrees – don’t know how to interview.”

CULINARY ARTS

Bozeman’s restaurant owners have the greatest difficulty of businesses in any sector studied in finding and retaining qualified culinary staff and restaurant management teams. From line cooks to restaurant general managers – they need every qualified person they can find. With over 300 restaurants in the Bozeman area, plus resorts, the hospital, University, and school districts, the need for trained chefs is far higher than Montana’s statewide occupational hiring outlooks suggest.

One local restaurant owner hypothesizes that every restaurant in the area would annually hire at least one Gallatin College program graduate, and that the hotels and resorts would annually hire five or six graduates. Another notes that he currently hires ten to fifteen MSU students from other degree programs every year, and would welcome the chance to hire students who came out of culinary arts programs. Another restaurant owner suggests that MSU/Gallatin College could become the headquarters of culinary training in the state, and should offer either a four year degree program or a number of certificate and two year

“One of the major problems those of us in the restaurant business have is the lack of job applicants who have culinary ability. There is a huge lack of trained people who can execute more difficult culinary techniques. Right now there is high turnover. But if you have someone who is trained and committed to an industry and they are going to advance themselves and improve their culinary resume. When you don’t have training programs you don’t have that commitment: adding an accredited program would have great impact. With a local program, graduates could establish themselves and make \$65,000 as a sous chef, or go on and make \$150,000 as an executive chef here in the Valley.” – Bozeman restaurant owner.

programs that could be combined to provide a comprehensive training foundation. (One employer noted that Central Wyoming College, in Jackson Hole, offers a combination of two year programs in culinary arts and hotel management that works closely with Jackson Hole resorts and restaurants and provides many of their employees. A local program could potentially do the same for Bozeman and the Greater Yellowstone area.)

HOSPITALITY

Hospitality businesses are interested in hiring as many prospective Gallatin College hospitality/culinary arts graduates as they can. They find that it is currently hard to meet their franchises' national standards for employee educational attainment because of lack of training opportunities for local students. Area full service hotels and motels support the idea of a culinary program as they now often fill the same cook positions two to three times a year due to lack of skilled employees. They are also interested in restaurant managers, and overall hotel staff.

Hospitality businesses in the region including those in Yellowstone Park face also the same needs as the financial services businesses in the area. They need trained general administrators with some basic accounting skills and some IT capacity who are also trained in customer service and general communications: many currently hire MSU students coming out of general business programs who are overqualified for positions. Most hospitality businesses are looking for general and floor manager positions, front desk managers, or basic retail management. "We look for general administrative or management experience with a background in basic financials."

In this field, basic accountability is the top desired knowledge/skill set. Employers are having a difficult time finding hourly employees and first level supervisors who are accountable and who show up on time and stay on the job. They feel this is the biggest issue facing their businesses in this region, and that it is an issue that did not previously exist. "New employees are not of the same quality as we saw 10 years ago. We have seen a real lack of accountability. They haven't even been taught the basics – showing up on time, following through on the job. Most are not getting relevant work experience in their off-time to support their academic learning. I am not seeing the same work ethic we used to see – not long ago - at all. Even the resumes are sloppy. Their communication skills are poor – they haven't been taught any of this. They don't even know where they have applied for jobs. If you are lucky today, here in Bozeman, you will see 10 out of 75 resumes that may show a qualified applicant. Even references don't matter: many are giving fake references. You would have thought the quality of the applicant would go up in our area, but instead there is a total lack of professionalism."

One business leader whose company recruits individuals for jobs in Yellowstone and West Yellowstone noted extreme difficulty of keeping the type of employees who would normally be expected to have associate or certificate degrees on the job. "We're at the point where management/basic management

turn-over is initiated by us because of lack of quality – and these are for positions with some college or even four year college degrees. A few years ago our turn-over was three to four percent. Now, because of lack of quality in the people who have applied, it is seventeen to twenty percent.” This problem would be substantially relieved, many noted, if there were applicants who were graduates of Gallatin College programs who sought long term career paths in the region.

Another resort/hospitality employer agreed. “Our need is for staff to be given the instruction to understand how to take care of our guests. Customer service is the most essential training need. We need people who have good overall administrative training and skills.” This person went on to detail changes in the resort industry that are leading to less seasonal hourly employment and more long-term investment in local/resident employees who move up through the ranks. “More and more we are moving to a year round operation – meetings and conferences in the summer, skiing in the winter. So we focus on getting people with the right knowledge mixed with basic experience who can grow and move up the ranks. We are becoming very committed to hiring from within. But even to fill seven hundred seasonal positions we go through some 2,500 resumes, because people lack the academic training and basic areas of knowledge we seek. Attrition is also very high – thirty to forty percent a year – when we hire from outside the area. So we’d be very excited to work with Gallatin College to use and even help shape some of these programs. We’d like to get to the point of grooming people who come in with entry level jobs so they stay and move up and so attrition and seasonal hires from outside the area are reduced. We could be a good customer for Gallatin College, and if the right classes were offered at the right time, we would end up sending our people who we want to see progress there for additional training.”

Within the Bozeman area and throughout Montana, guiding is an industry that needs to recruit qualified personnel and is struggling to find the right people in a narrow niche of the hospitality market. Like the other hospitality businesses, guide businesses need people who have “good and savvy people skills, administration and general or basic marketing, and IT. We need people who can manage web sites, manage social media, manage the retail operation, be able to do basic accounting, and be great with people.”

But the area needs go beyond this. Bozeman businesses continue to strive to draw the recreational tourism business to the area, and need to hire individuals for seasonal and year round jobs who have a mix of basic business, customer service, and guide experience. This involves knowledge of the sport and also CPR and back country first aid, GPS and even a knowledge of the area environment and ecosystem. This combination of skills was mentioned as welcomed and needed by resort operators and even more so by area guiding businesses, who feel there is an opportunity for Gallatin College to offer a guide certification program that would provide a skilled workforce for area businesses that now frequently recruit from throughout the US. The Fishing Outfitters of Montana has been trying to establish a certificate program but has been unable to pull together the range of courses needed.

WELDING, MACHINING AND CONSTRUCTION TECHNOLOGY

If this analysis sounds the same drum in every section, it is because employer needs are the same across virtually every industry the researchers studied: essential work skills.

One of the primary needs of companies in the machine technology industries is the same as those of the financial, hospitality, and health businesses in the area: “We’re looking for people with customer service knowledge, sales ability, basic math, and marketing.” As leaders from this field described their needs, many put general administration personnel with IT experience at the top of the list. As one individual said, “I can train anyone to fix a furnace, but on my own I can’t train attitude, good work ethic, good customer rapport – and this is what we can no longer find. How do I teach listening skills? How do I teach appearance? I don’t know how to teach a new employee not to show up at a customer’s place in ripped and torn clothes. And then there are basic management skills. As a business owner, how do I train people in all of these?”

That said, area employers are finding it very difficult to find a workforce skilled in construction technology. Jobs are going unfilled. Individuals hired are under-qualified. In rare cases, but examples nonetheless, businesses are unable to expand. “We’re seeing a strong sales projection for next year,” one noted, “and we will be looking to hire one person. But we can’t find anyone who is trained in CNC (computer numeric controls) machinery. We’ll post all over the state.”

Machine tech business leaders stress that the needs of their field are very different today than even a decade ago. They find that local high school graduates are “completely unprepared for the construction trades, and don’t even know that the construction trades are vastly different from the old blue collar jobs.” Qualified applicants today know trigonometry and electrical theory – subjects usually associated with four year college degrees rather than known by high school students who go directly into trades. “Area students definitely need post-secondary training to get jobs in this field,” one business owner said, “and they don’t realize they can’t just come into these jobs any more right out of high school. A two year degree would definitely help them fare better. Within ten years, a guy with some post secondary education like an associate degree would be running crews, and I would hire that person in a heartbeat. There is a strong need.”

Area resorts have difficulty finding skilled computer-basic mechanics. Lift maintenance is one of the specialized areas of CNC tech need for ski resorts in the area, along with vehicle maintenance. “We could really benefit if there was a training program for some of the specialized welding and equipment operations that ski resorts need. We cannot find people, locally, who have this training. Specialized mechanics for the heavy equipment needed and lift mechanisms, and licensed electricians – we can’t find people who are trained. We could hire people annually if they were trained in the welding and machining and construction tech fields.”

Another business owner who recruits applicants who have graduated from two year computer numerical control programs as a part of machining associate degrees noted that “we simply cannot get

the caliber of applicants we need. High school students don't have enough training, and four year college graduates have too much or the wrong kind of training."

How big is the need for students with welding or machining tech degrees? "You simply cannot make enough graduates fast enough." One business owner noted that area businesses have not been able to expand because they cannot find qualified personnel. Overall, local businesses would likely employ 6-8 CNC trained students a year for a number of years.

COMPUTER TECHNOLOGY

While Bozeman has developed a reputation as a center for computer technology, its computer tech firms do not need or anticipate looking to a local workforce of computer technologists. Current and anticipated hiring is national and even international in scope, from individuals who have computer science and computer engineering degrees and advanced experience. Even interns hired by these firms often have master's degrees.

However, these businesses need general administrative and clerical staffs, and their need for qualified individuals in these facets of their businesses is growing.

SUMMARY QUANTIFICATION OF OCCUPATIONS WITH THE GREATEST NUMBER OF OPENINGS, MOST JOBS, GREATEST NEEDS VOICED BY LOCAL BUSINESSES

Area employers were asked to quantify their anticipated workforce needs. According to them, workforce needs will include:

- 1) Cooks, including line cooks, sous chefs, food prep workers, managers. Annual estimated need: 300+ graduates.
- 2) Hospitality staff and guides. Estimated annual need: 200+ year round; as many as 400 seasonal graduates.
- 3) Medical assistants and techs and practical nurses. High immediate and long term need. Annual estimated need: 150+ graduates.
- 4) Medical records specialists with general administrative and I.T. experience and coding certification. High immediate and long term need. Annual estimated need: 75 + graduates.
- 5) General administration personnel with IT experience and field-specific knowledge – i.e. banking, insurance, hospitality. High immediate and long term need, high numbers of employees across all fields. Annual estimated need: 200+ graduates.
- 6) CNC Machine technicians. Narrow but pressing immediate and long term need. Annual estimated need: 6 – 10 graduates. Other machine tech annual needs: up to 10 graduates.

PART 3. STUDENT INTERESTS

ALTERNATIVE STUDENTS

Alternative students have greater urgency and need in their consideration of Gallatin College than traditional high school seniors or graduates. Alternative students include adults who are returning to school or considering post-secondary education for the first time as a way to gain specific skills needed for employment. This study's review of alternative students included a round table discussion/focus group with a group of adults who either have considered returning to school for a certificate or associate degree or who are already enrolled in at least one class at Gallatin College, and an on-line survey.

Focus Group Findings

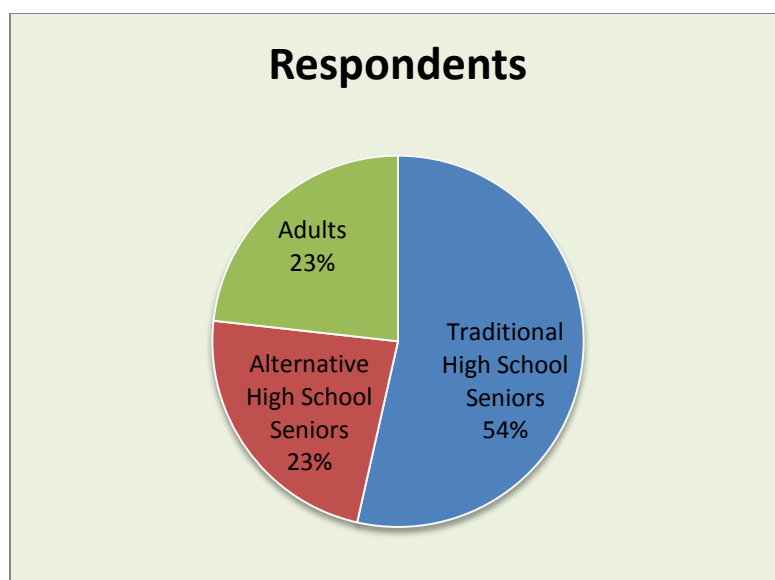
- Certification – in any field studied – is important to these students.
- They want to know that the areas they study are areas in which there are local jobs.
- They want flexibility in course schedules so they can juggle jobs and their families.
- They want a program with “liaisons for grown-ups” – not programs, support and/or communications geared to younger students. But they don’t want “a support group.”
- Alternative students who have tried on-line classes have found them deficient and are reluctant to take such courses if they were offered at Gallatin College. This is because they feel that local employers want students who have “local” training and hands-on experience that combines MSU experience and local internships; and because due to poor prior experiences with on-line learning, they want to be assured of good quality faculty who will be available to work with them.
- Alternative students are very cost-benefit oriented. They want to be sure that if they spend the money and time to get a degree in a specific subject area there will be practically the assurance of local employment in that area.
- Other alternative students want Gallatin College courses to offer tutors.
- Alternative students want to attend classes on the campus of MSU.

TRADITIONAL HIGH SCHOOL STUDENTS

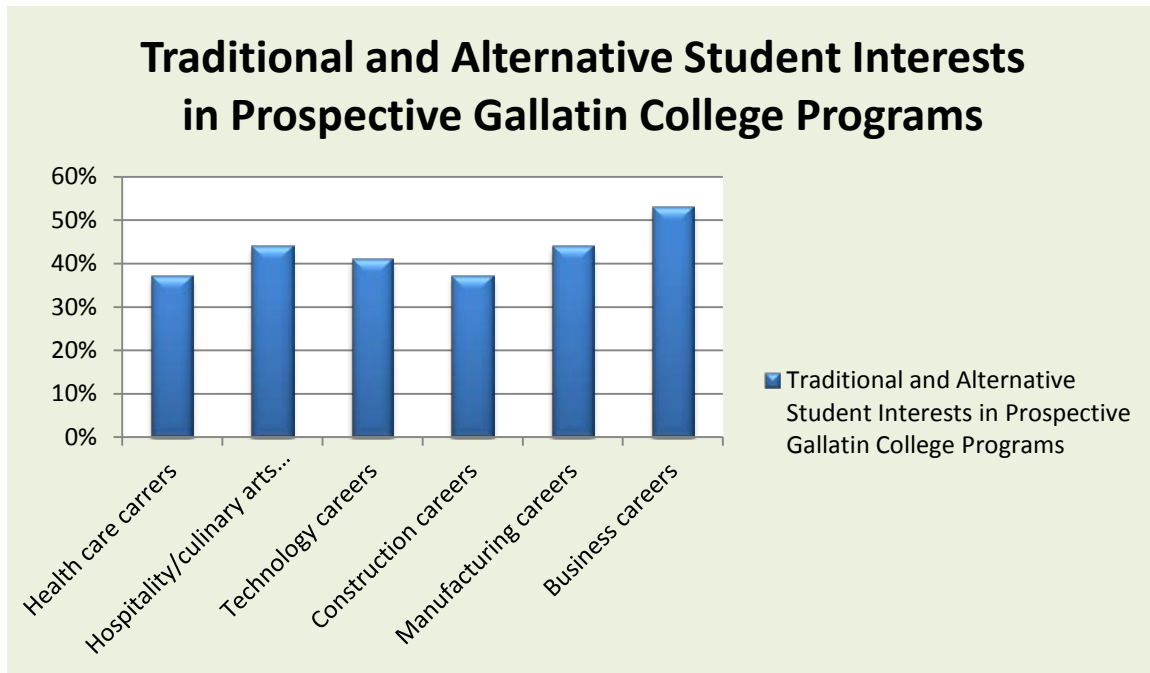
- There is high interest in Gallatin College.
- There is even higher interest in the opportunity to continue on from an associate degree program into a four year degree program.
- Less than half the area high school students have any real understanding of the range of associate degree options.
- Students not considering associate degrees are most likely to become interested in certificates and one-year learning options. Students considering four year colleges are unlikely to be interested, at this point in their lives, in one-year certificates: they appear to be interested in Gallatin College more as a stepping stone to four year college than as a place to achieve an associate degree linked to employment opportunities.
- The highest level of interest is in business administration and culinary jobs, followed by medical and IT.
- These students want to be able to work part time while attending school for a degree or certificate, and want flexibility including evening courses. On-line learning is not widely sought, but a combination of on-line and person-to-person learning is of interest.

SURVEY RESULTS

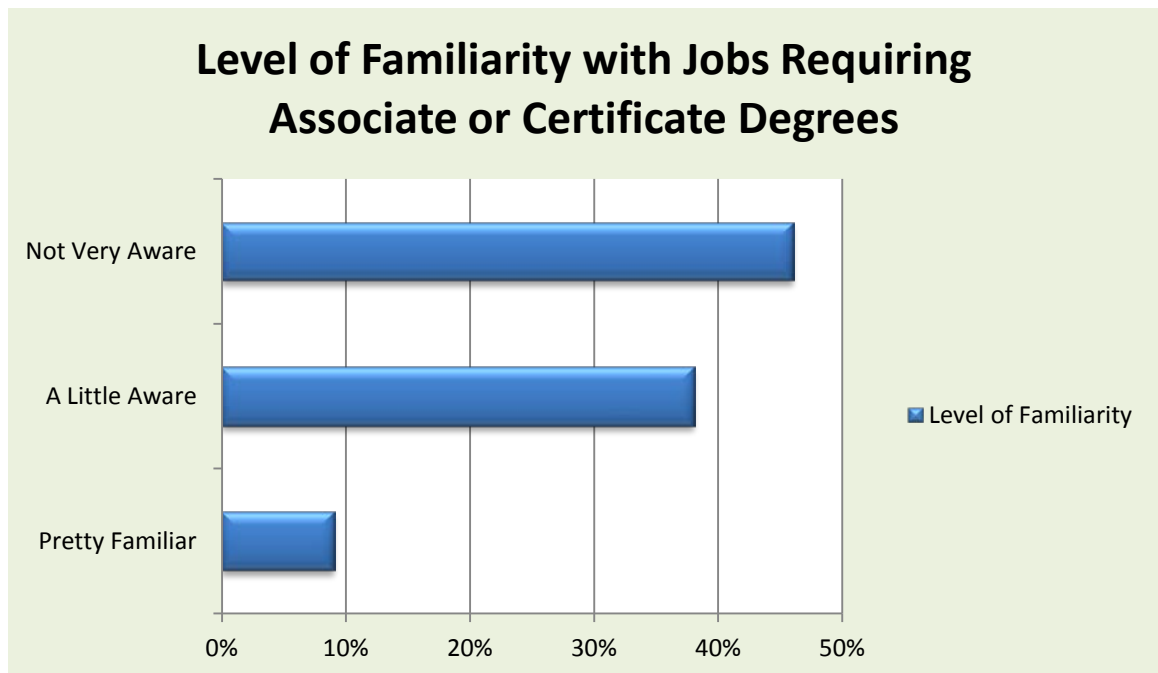
1. NATURE OF THE RESPONDENTS



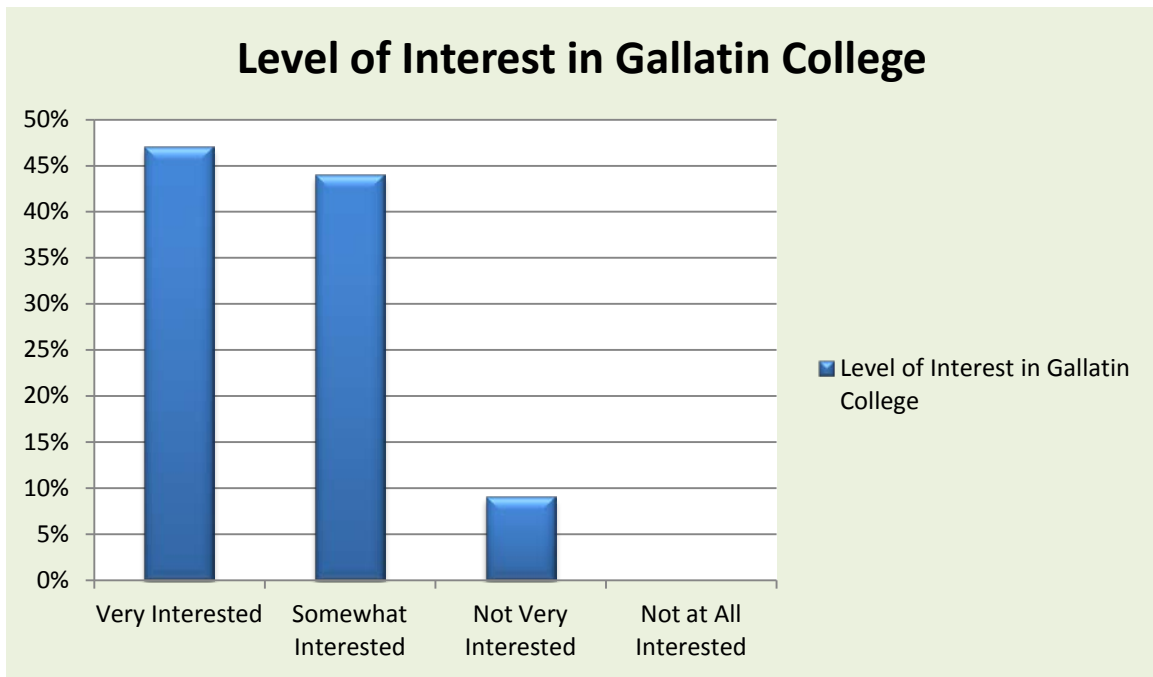
2. RESPONDENTS' TOP CAREER INTERESTS



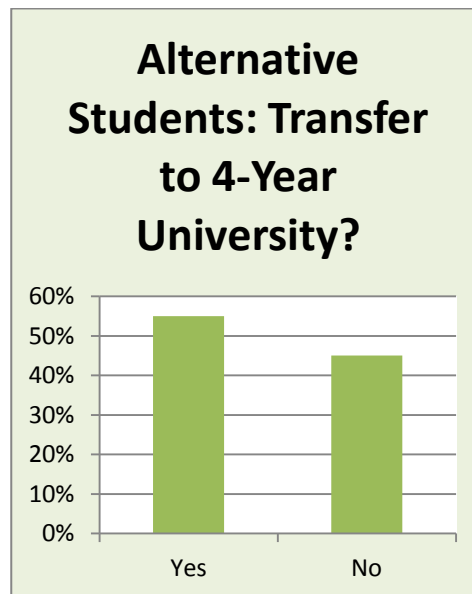
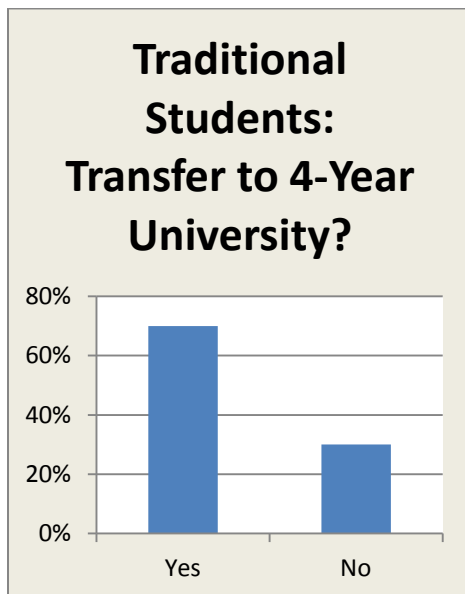
3. RESPONDENTS' LEVEL OF FAMILIARITY WITH THE KIND OF JOBS THEY COULD BE ELIGIBLE FOR WITH AN ASSOCIATE DEGREE OR CERTIFICATE.



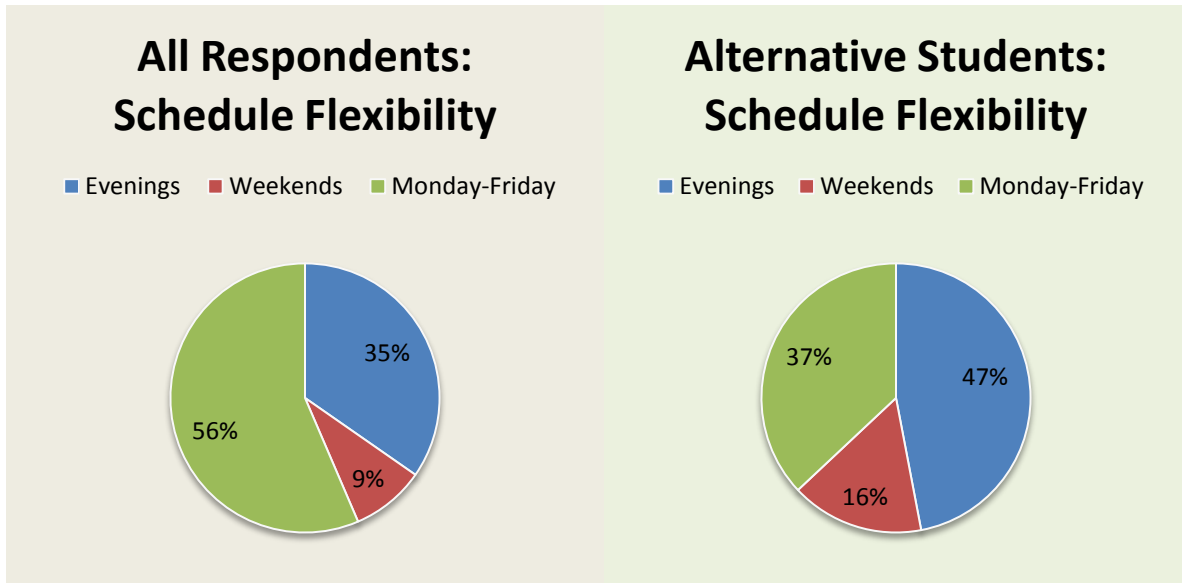
4. RESPONDENTS' INTEREST LEVEL IN GALLATIN COLLEGE IF IT OFFERS TRAINING FOR JOBS THEY SEEK.



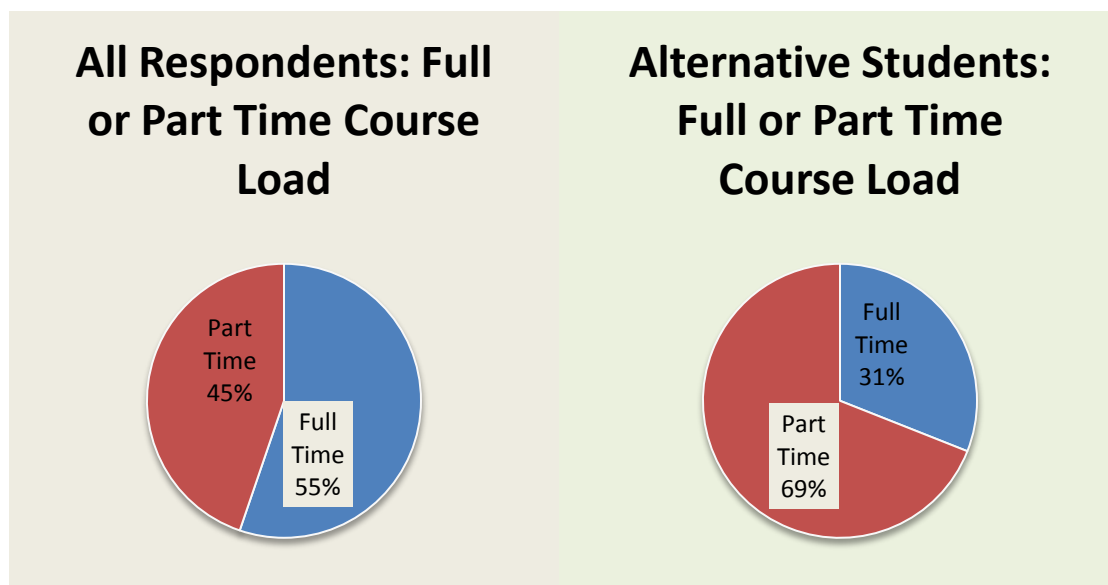
5. INTEREST IN PURSUING AN ASSOCIATE DEGREE FOR TRANSFER INTO FOUR YEAR UNIVERSITY.



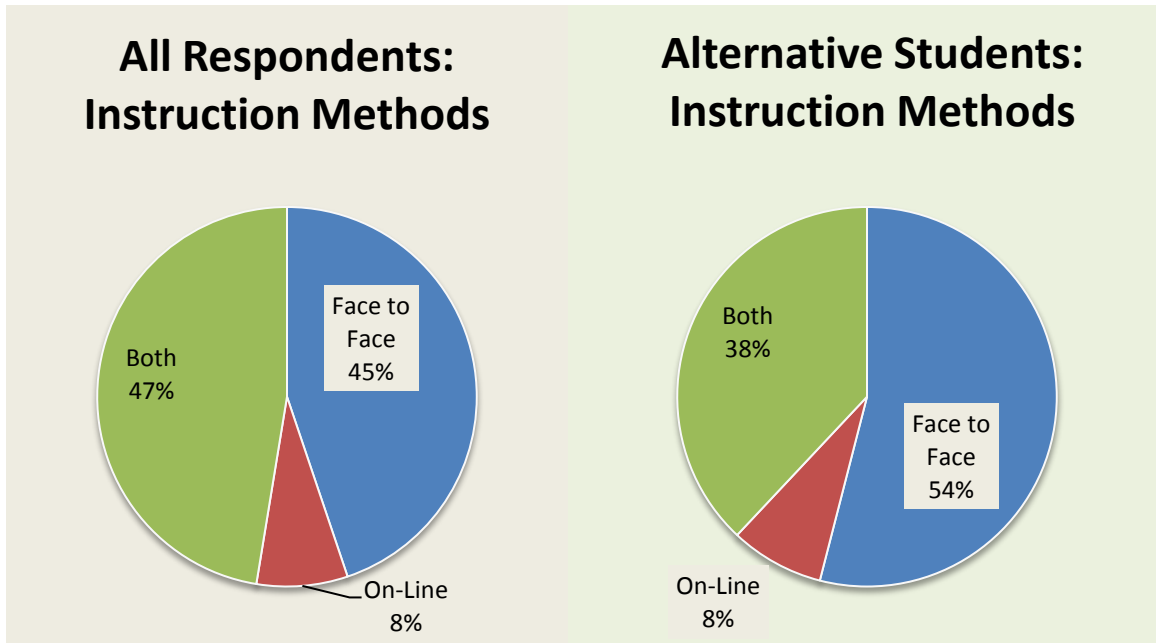
6. BEST TIME FOR CLASSES



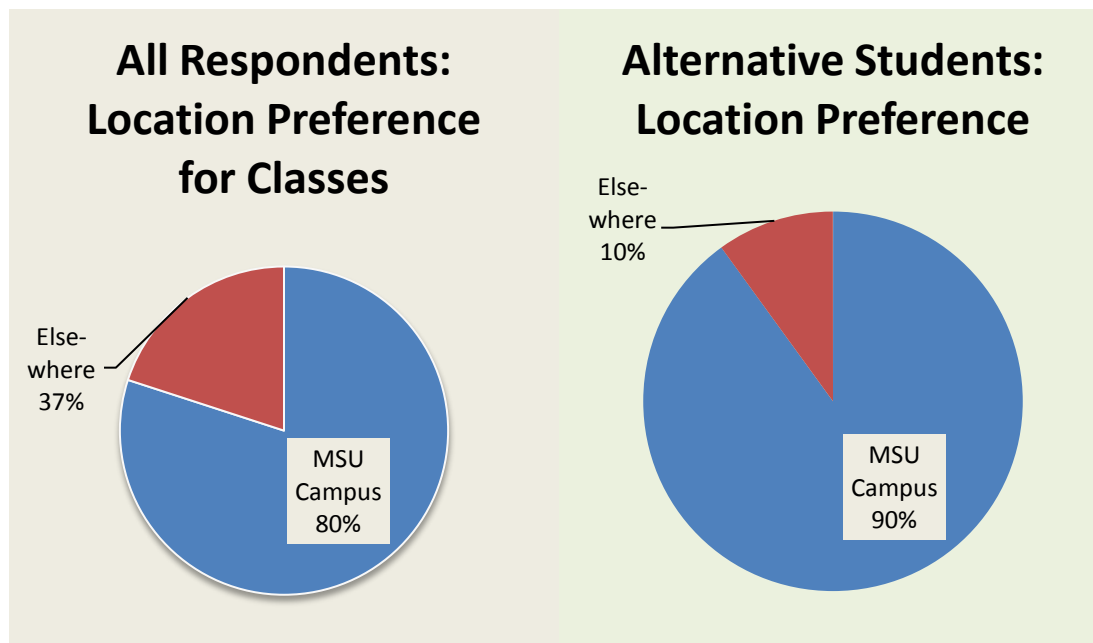
7. FULL OR PART TIME



7. TYPE OF INSTRUCTION SOUGHT



8. LOCATION: MSU OR COMMUNITY



9. FOR ADULTS CONSIDERING RETURNING TO GALLATIN COLLEGE, WOULD YOU SEEK A CAREER CHANGE AFTER COMPLETING A TWO YEAR OR CERTIFICATE PROGRAM?



10. RESPONDENTS INTERESTED IN RECEIVING INFORMATION FROM GALLATIN COLLEGE.

